this building was contributed by: IBUS, Germany

Ludwig-Erhard-Haus

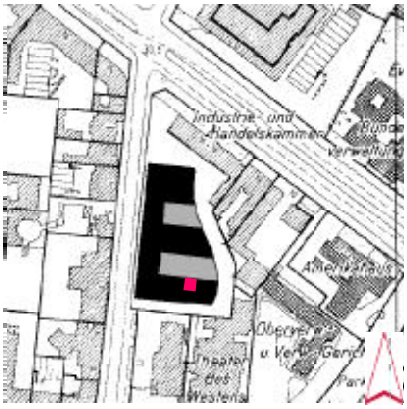
Berlin, Germany
52,5°N, 13,2°E
predominantly cloudy

mixed use

combi office concept, cellular offices adjacent to an atrium

building

The Ludwig-Erhard-Haus accommodates the Berlin Chamber of Commerce and the local stock exchange. The floors of the building are carried by posts suspended from a series of arched girders. They create the significant radial shape of the building. The building comprises two atria which are part of the natural ventilation strategy.



Urban environment of the Ludwig-Erhard-Haus. The selected room faces the southern atrium.

Fisheye photo showing the view from the office window and the radial slope of the atrium glazing.

daylight strategy

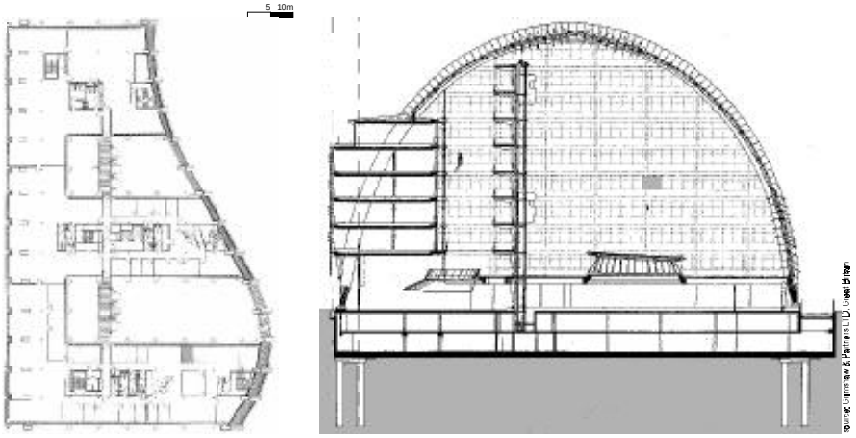
Due to the compact shape of the building, the office floors turn out to be fairly deep. Even though transparent partitions allow an extended view from the central office area to the exterior, no daylight redirecting devices are used to enhance the penetration of natural light. Therefore only the perimeter of the office floors receives enough daylight, while the central core remains dependent on artificial light. The office recorded is north facing, and therefore only equipped with an interior shading system to protect from glare. This system is integrated in the frame of the lower window.

The radial shaped girders with suspended posts generate the significant shape of the building.

Southern atrium of the Ludwig-Erhard-Haus; the skylight of the stock exchange is shown in the foreground.

office

According to the combi-concept, with individual offices surrounding an open work area, the cellular offices themselves are quite small. Clerestories in all partition walls connect the spaces visually and make them appear larger. The concrete slabs of the ceiling are exposed to the interior. A double floor is used for the wiring.

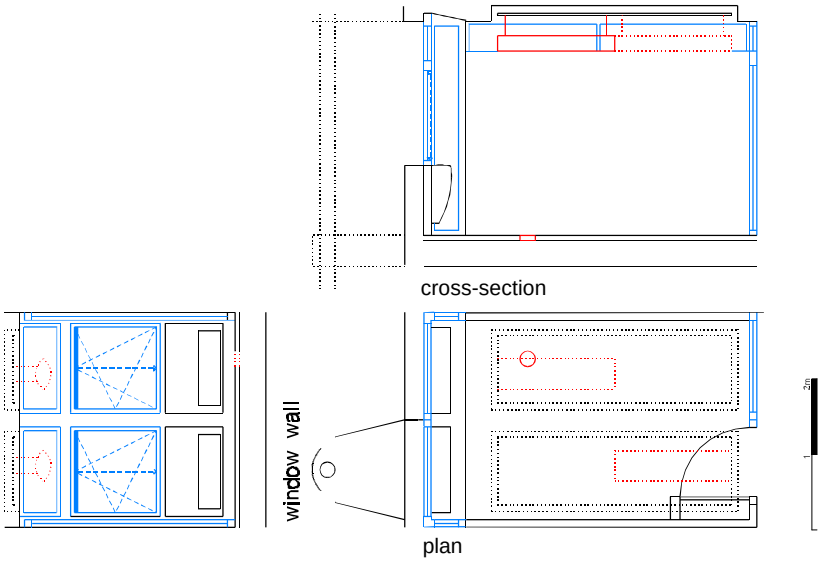


Floorplan and cross-section of Ludwig-Erhard-Haus.

Fisheye photo showing interior view of office on the 5th floor of the building. The window faces north.

Operable top hinged sashes integrated in the atrium glazing are part of the ventilation strategy.

A manually operated paper-like fabric is integrated in the window frame to protect from glare.



building data	
number of stories	9
architect	Grimshaw & Partners
year of completion	1998

office room	
daylight strategy	unilateral, sidelighting
dimensions (depth/width/height)	4,2 m / 2,6 m / 3,0 m
room area	11 m²
floor	carpet, gray, 15%
wall	white coated partitions, 61%
door	timber veneer, 47%
ceiling, panel area	construction board, 61%
ceiling, structure	white painted concrete, 80%
window frame	aluminum, 90%
cladding of ventilation unit	enamel paint, 23%
atrium facing window	double glazing, climalit
rear wall window	double glazing, float
lamp types	fluorescent lamps
installed power density	11 W/m²

facade		north facade	rear wall
data	orientation	5°	185°
	glazed area	4,0 m²	3,7 m²
	opening index	52%	48%
function	daylighting	●	-
	view outside	●	●
	ventilation	●	-
	operable	●	-
	shading	○	-
	redirection	○	-

systems		folded blind
function	sun shading	-
	glare protection	●
	redirection	-
location	inside	●
	window pane	-
	outside	-
	movable	●
	fixed	-